Fig. 1

Schematic view of a preferred apparatus used in producing nonwoven spacer fabric according to present invention

Fabric
Cross Sections
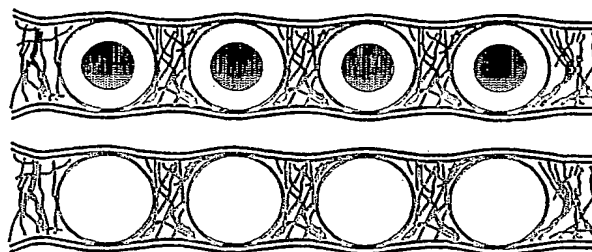with and without
filling materials

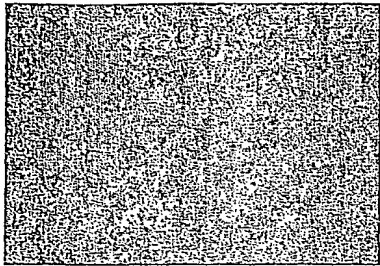Fig. 2

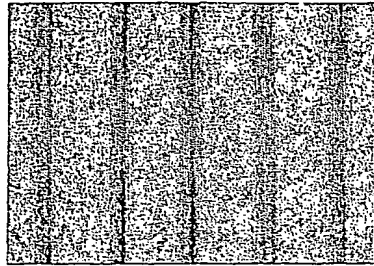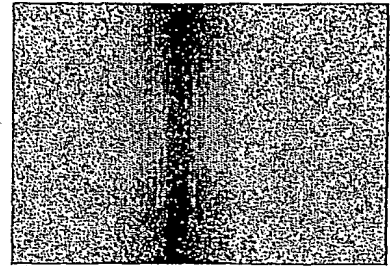Schematic cross-section of a typical spacer fabric produced according to claim 1
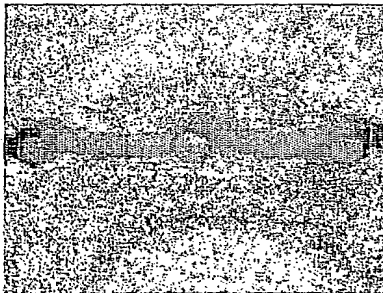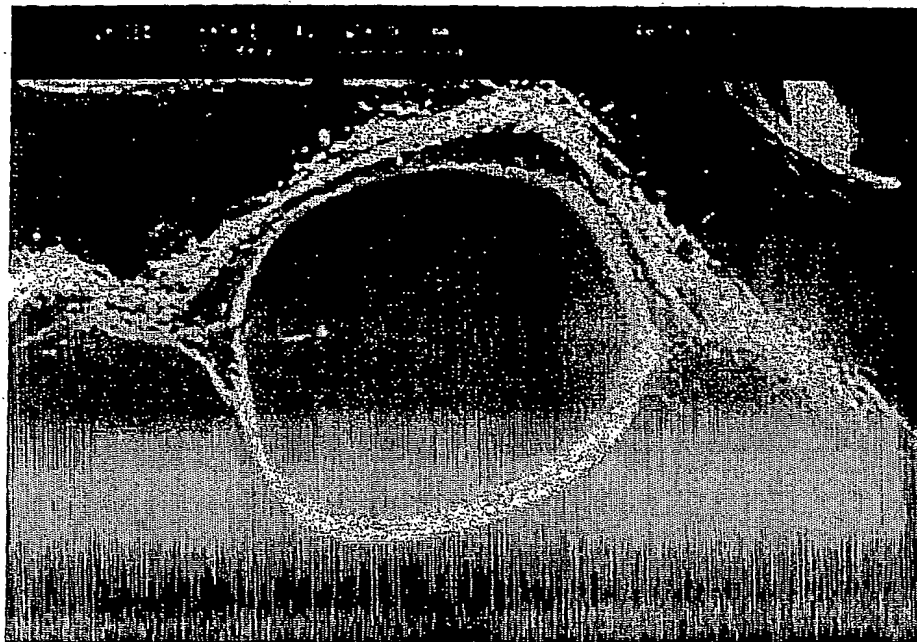
Fig. 3

Fig. 4
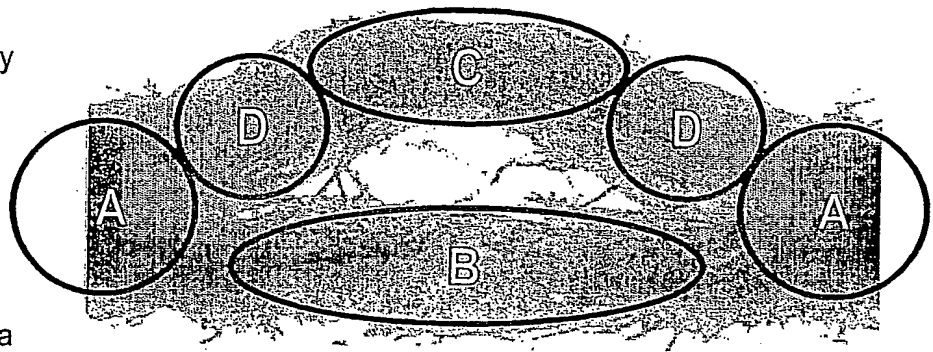
Fig. 5

Fig. 6

Fig. 7
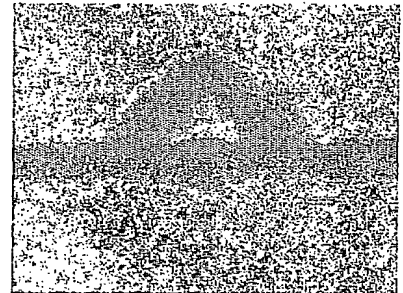
Fig. 8

Fig. 9

Heterogeneous:
orientation, porosity
and permeability vary
in the fabric

A = Inter-cavity area

B = Base layer (in
contact with
the forming belt)

C = Upper cover area

D = Corner area

When jet impact is from one side:-
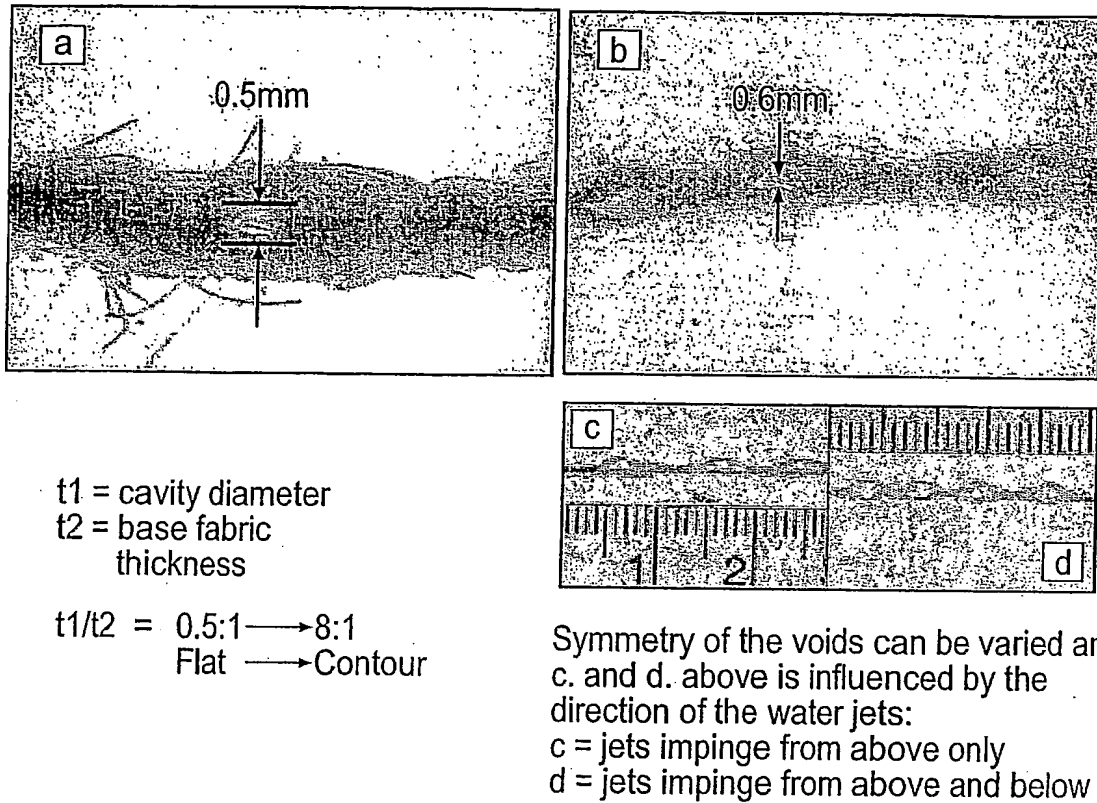Permeability in area: D > C > B > A

Fig. 10

t1 = cavity diameter
t2 = base fabric
     thickness

t1/t2 = 0.5:1 ⟶ 8:1
      Flat ⟶ Contour

Symmetry of the voids can be varied and
c. and d. above is influenced by the
direction of the water jets:
c = jets impinge from above only
d = jets impinge from above and below

Fig. 11